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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/014,442

12/14/2001

Hiroyuki Deguchi

1095.1206

3755

21171

7590

02/25/2005

STAAS & HALSEY LLP

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EXAMINER

PAYNE, DAVID C

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/014,442

Applicant(s)

DEGUCHI ET AL

Examiner

David C. Payne

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/14/01, 12/02/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Pedersen US 6,414,775 B1 (Pedersen).

Re claim 1, Pedersen disclosed

An optical transmission system comprising: an end station including a monitor instruction sending unit for sending a monitor instruction for monitoring an operating condition, and an operating condition recognizing unit for receiving a response signal and recognizing the operating condition; and a repeater including: a filtering unit filtering the monitor instruction and the response signal; a monitor control unit monitoring an operating condition of the repeater in response to the monitor instruction and generating response information that is a result of monitoring; a pump unit applying a pump light to an optical fiber transmission medium and enabling an optical amplification using the optical fiber transmission medium as an amplifying medium; a regeneration control unit performing a regeneration control of the response signal sent by another repeater to thereby generate a regenerated signal; a modulation control unit modulating the pump light by the response information or the regenerated signal to thereby generate the response signal; and a photocoupler unit that is connected to the optical fiber transmission medium and sends the response signal in a direction identical

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to or reverse to that in which an optical main signal travels (col./lines: 2/25-60, Figure 1 and 2, 3/14-67, 4/1-67).

Re claims 2 and 6, Pedersen disclosed

wherein the pump unit performs backward Raman amplification. (60 of Figure 2).

Re claims 3 and 7, Pedersen disclosed wherein, when the response signal travels in the direction reverse to that in which the optical main signal travels, the modulation control unit superimposes the result of monitoring onto the pump light that is obtained from the photocoupler unit and travels in the direction reverse to a pumping direction. (col./lines: 2/25-60, Figure 1 and 2, 3/14-67, 4/1-67).

Re claims 4 and 8, Pedersen disclosed wherein the regeneration control unit ceases the regeneration control when the modulation control of the pump light is based on the response information. (e.g., col. 2/65-67).

Re claim 5, Pedersen disclosed

A repeater for an optical transmission comprising: a filtering unit filtering a monitor instruction for monitoring an operating condition and a response signal; a monitor control unit monitoring an operating condition of the repeater in response to the monitor instruction and generating response information that is a result of monitoring; a pump unit applying a pump light to an optical fiber transmission medium and enabling an optical amplification using the optical fiber transmission medium as an amplifying medium; a regeneration control unit performing a regeneration control of the response

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signal sent by another repeater to thereby generate a regenerated signal; a modulation control unit modulating the pump light by the response information or the regenerated signal to thereby generate the response signal; and a photocoupler unit that is connected to the optical fiber transmission medium and sends the response signal in a direction identical to or reverse to that in which an optical main signal travels.

(col./lines: 2/25-60, Figure 1 and 2, 3/14-67, 4/1-67).

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp

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David C. Payne  
Patent Examiner  
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